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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,342	12/31/2003	Jeffry G. Weers	53311-US-CNT	7605

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CORPORATE INTELLECTUAL PROPERTY
ONE HEALTH PLAZA 104/3
EAST HANOVER, NJ 07936-1080

EXAMINER	
CARTER, KENDRA D	

ART UNIT	PAPER NUMBER
1617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/751,342	WEERS ET AL.	
	Examiner	Art Unit	
	KENDRA D. CARTER	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15,18-20,23-25,28-31,38-40,63-78 and 97-101* is/are pending in the application.

4a) Of the above claim(s) *97* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20,23-25,28-31,34-40,63-78,98,100 and 101* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The Examiner acknowledges the applicant's remarks and arguments of February 6, 2009 made to the office action filed October 6, 2008. Claims 1-15, 18-20, 23-25, 28-31, 38-40, 63-78 and 97-101 are pending. Claim 99 is amended and claims 100 and 101 are new.

In light of the amendments the claim objection of claim 99 is withdrawn.

The Examiner acknowledges Applicant's indication that a terminal disclaimer will be filed upon identification of allowable subject matter to obviate the provisional obviousness-type double patenting rejections over U.S. Patent Application No. 11/187,757. However, as such terminal disclaimers have not as-yet been filed, the provisional obviousness-type double patenting rejections over these co-pending applications are being maintained.

For the reasons in the previous office action and below, the Applicant's arguments of the 35 U.S.C. 103 rejections were found not persuasive, thus the rejections are maintained.

Due to the addition of new claims the modified 35 U.S.C. 103(a) and new 35 U.S.C. 112, first paragraph rejections are made below. The Applicant's arguments are addressed below.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-15, 18-20, 23-25, 28-31, 38-40 and 98-100 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 23-25, 27-30, 35-44 of copending Application No. 11/187,757 ('757) in view of Straub et

al. (US 6,395,300 B1) in further view of Schmitt et al. (US 4,950,477). Although the conflicting claims are not identical, they are not patentably distinct from each other. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Application '757 teaches a method for treating a patient suffering from a fungal infection of the lung, comprising administering to the patient a therapeutically effective amount of a pharmaceutical formulation comprising a lipid matrix and at least one particle of an antifungal agent in the lipid matrix wherein the aerosolized (see claim 35) pharmaceutical formulation is for pulmonary administration (see claim 45) via inhalation (see claims 23 and 27). For clarification, the application '757 defines treating as providing prevention of a particular condition (see page 2, paragraph 26, lines 6-8). The lipid matrix comprises a phospholipid (see claim 7). The composition can be a dry powder that has a bulk density of less than 0.5 g/cm^3. The antifungal agent is amphotericin B (see claims 29 and 30). The amount of antifungal agent is at least twice the minimum inhibitory concentration of the antifungal agent for at least one week (see claim 35), three weeks or three months (see claims 39-42). Thus, determining the minimum inhibitory concentration is taught in application '757 because in order to administer twice the minimum inhibitory concentration, the minimum inhibitory concentration of the antifungal agent needs to be determined. The minimum inhibitory concentration is in the epithelial lining or the solid tissue of the lung (see claims 36 and 37), with a lung concentration at least 9 μg/g or in the range of 9 μg/g to 15 μg/g (see

claims 43 and 44). No active agent is detectable in the patient's serum or organs subsequent to administration of the formulation (see claims 31-34). The minimum inhibitory concentration is the minimum inhibitory concentration in the epithelial lining or solid tissue of the lung (see claims 36 and 37).

The application '757 does not teach a single dose or two doses of the pharmaceutical formulation during the first week of administration (applicant's claims 8 and 9). The two period administration wherein the antifungal agent is administered more frequently or at a higher dosage during the first period than during the second period is also not taught (see applicant's claims 10). Neither is the administration comprising delivering the formulation periodically to maintain the antifungal agent lung concentration taught (see applicant's claim 13). '757 also does not teach that the powder is a porous particle (claims 1 and 23), or that the specific fungal infection treated is aspergillosis (claims 23, 98 and 99).

To one of ordinary skill in the art at the time of the invention would have found it obvious to combine the method of '757 and the administration detailed above in the applicant's claims 8, 9, 10 and 13 and determining the minimum inhibitory concentration of an antifungal agent for inhibiting pulmonary fungal growth because of the following: (1) the antifungal agent is administered for at least one week, three weeks or three months to maintain the twice the minimum inhibitory concentration (see claims 35 and 40); (2) it is within the art to administer a drug several times during a treatment. In order

to treat the fungal infection the antifungal agent must be present in concentrations that are effective. Whether the drug is administered once, twice, or several times, the important factor is that twice the minimum inhibitory concentration is maintained in the lungs.

Straub et al. teaches low aqueous solubility drugs such as the anti-fungal drug amphotericin B in a porous matrix form to provide a faster rate of dissolution following administration to a patient, as compared to non-porous matrix forms of the drug (see abstract, lines 1-2 and 15-18 and column 4, lines 47-48). The preferred embodiment is for oral administration using a dry powder inhaler for pulmonary administration (see column 3, lines 1 and 6-8).

To one of ordinary skill in the art at the time of the invention would have found it obvious to combine the method of '757 and wherein the powder is porous because Straub et al. teaches that a porous matrix of the antifungal agent amphotericin B provides a faster rate of dissolution following administration to a patient as compared to non-porous forms of the drug (see abstract, lines 1-2 and 15-18 and column 4, lines 47-48).

Schmitt et al. teaches a method of treating pulmonary aspergillosis by administering amphotericin B in an aerosol spray (see abstract).

To one of ordinary skill in the art at the time of the invention would have found it obvious to combine the method of '757 and wherein the specific fungal infection treated is aspergillosis because Schmitt et al. teaches that amphotericin B treats aspergillosis (see abstract).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 100 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not teach that all antifungal agents will have at least about 150 times a concentration of antifungal agent in the lungs delivered intravenously, and wherein a concentration of antifungal agent is the serum is substantially zero. The only results of this kind were provided for amphotericin B not all antifungal agents (see paragraph 32 and figure 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

(1) Claims 1-15, 18-20, 23-25, 28-31, 38-40, 63-76 and 98-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ponikau (US 6,207,703 B1) in view of Straub et al. (US 6,395,300 B1).

Ponikau teaches a pharmaceutical composition for treating an immune response to fungus in a mammal or a fungal related condition in the pulmonary anatomy comprising an effective dose of an anti-fungal agent (see column 10, lines 42, 43, 50-55) such as amphotericin B (see column 4, line 55 and claim 19) in an aerosol form as a

powder or solution (see column 3, lines 65, 66 and column 4, lines 1; addresses claims 1, 11, 15, 20, 23, 63, 67, 71 and 76). Any fungal organism living in the mucus of a mammal can be a non-invasive fungal organism that is capable of inducing mucositis since it is the mere presence of the organism in an intolerant individual's mucus that causes inflammation, which include without limitation *Aspergillus* and *Candida* (see column 19, lines 9-25; addresses claims 23, 98 and 99). The formulation contains about 0.01 ng to about 1000 mg of the antifungal agent (see column 4, lines 10-12; addresses claims 12-14, 23, 34 and 68-70). The effective amount of a formulation can change or remain the same during an effective duration. The effective frequency of direct mucoadministration can be from about four times a day to about once every other week in some embodiments of the invention, or about twice a day in still other embodiments of the invention. In addition the effective frequency of direct mucoadministration can be greater than once a day, or greater than once a week. The effective duration can be greater than about 7, 14, 30, 60, 90 days (see column 4, lines 28-38; addresses claims 1-10, 23, 28-31 and 63-65) or can vary from several days to several weeks, months or years (see column 25, lines 43 and 44). A typical effective amount can be any amount greater than or equal to the minimum inhibitory concentration for the fungal organism, and such amounts can be determined for individual antifungal agents using commonly available or easily ascertainable information involving antifungal effectiveness concentrations (see column 24, lines 10-12 and lines 21-23; addresses claims 1, 23 and 63). Direct mucoadministration to the lung airways can include inhalations or nasal sprays provided that the administered agent contacts lung airway mucus prior to

crossing epithelium (see column 28, lines 9-12; addresses claims 1, 23 and 63). Any device can be used to administer the agent to the lung airway including inhaler, nebulizer, aerosol canister, spray can, and mask (see column 28, lines 17-20, addresses claims 1, 23 and 63). Other treatments can be used in combination with the antifungal agent to help enhance the treatment of non-invasive fungus-induced mucositis conditions, such as a second formulation with immunosuppressants (see column 29, lines 36-51; addresses claim 63).

Ponikau does not specifically teach that the minimum inhibitory concentration is in the epithelial lining or the solid tissue of the lung (claims 2, 3, 24, 25, 64 and 65). Ponikau also does not teach a bulk density of less than 0.5 g/cm^3 (claims 1, 23 and 72), a dry formulation (claims 20 and 76), wherein the pharmaceutical formulation comprises porous particles (claims 1, 23 and 73), wherein the pharmaceutical formulation further comprises a matrix material that comprises one or more phospholipids (claims 18, 19, 38, 39, 74 and 75). Ponikau also does not teach wherein the administration comprises delivering at least two doses per week of the pharmaceutical formulation before the administration of the immunosuppressive agent and wherein the target concentration is maintained by administering doses of the pharmaceutical formulation less frequently as disclosed in claim 66. Ponikau also does not specifically teach that after two days following administration, a concentration of antifungal agent in the lungs is at least about 150 times a concentration of antifungal agent in the lungs delivered intravenously, and

wherein a concentration of antifungal agent in the serum is substantially zero (claims 100 and 101).

Straub et al. teaches low aqueous solubility drugs such as the anti-fungal drug amphotericin B in a porous matrix form to provide a faster rate of dissolution following administration to a patient, as compared to non-porous matrix forms of the drug (see abstract, lines 1-2 and 15-18 and column 4, lines 47-48). The preferred embodiment is for oral administration using a dry powder inhaler for pulmonary administration (see column 3, lines 1 and 6-8). The matrix further includes a pegylated excipient, such as pegylated phospholipic to shield the drug from macrophage uptake, which prolongs its half-life or enhance bioavailability of the drug (see column 2, lines 63-67). The density of the dry porous matrix powder is preferably less than 0.8 g/mL to provide sufficient surface area to enhance wetting of the dry porous matrix and enhance drug dissolution (see column 3, lines 65-66 and column 4, lines 2-5).

To one of ordinary skill in the art at the time of the invention would have found it obvious and motivated to combine the method of Ponikau and the minimum inhibitory concentration is in the epithelial lining or the solid tissue of the lung because Ponikau teaches the following: (1) direct mucoadministration to the lung airways or pulmonary anatomy can include inhalations or nasal sprays provided that the administered agent contacts lung airway mucus prior to crossing epithelium (see column 28, lines 9-12 and see column 10, lines 42, 43, 50-55); and (2) a typical effective amount can be any

amount greater than or equal to the minimum inhibitory concentration for the fungal organism, and such amounts can be determined for individual antifungal agents using commonly available or easily ascertainable information involving antifungal effectiveness concentrations (see column 24, lines 10-12 and lines 21-23).

To one of ordinary skill in the art at the time of the invention would have found it obvious and motivated to combine the method of Ponikau and a bulk density of less than 0.5 g/cm^3, a dry formulation, and wherein the pharmaceutical formulation comprises hollow and/or porous particles within a matrix material that comprises one or more phospholipids because Straub et al. teaches the following: (1) drugs such as the anti-fungal drug amphotericin B in a porous matrix form to provide a faster rate of dissolution following administration to a patient, as compared to non-porous matrix forms of the drug (see abstract, lines 1-2 and 15-18 and column 4, lines 47-48); (2) the density of the dry porous matrix powder is preferably less than 0.8 g/mL to provide sufficient surface area to enhance wetting of the dry porous matrix and enhance drug dissolution (see column 3, lines 65-66 and column 4, lines 2-5); and (3) the matrix further includes a pegylated excipient, such as pegylated phospholipic to shield the drug from macrophage uptake, which prolongs its half-life or enhance bioavailability of the drug (see column 2, lines 63-67). Thus, it would be beneficial for the methods and compositions of Ponikau to be dry, have a specific bulk density, and wherein the pharmaceutical formulation comprises hollow and/or porous particles within a matrix

material that comprises one or more phospholipids because of the reasons stated above.

To one of ordinary skill in the art at the time of the invention would have found it obvious and motivated to combine the method of Ponikau wherein the administration comprises delivering at least two doses per week of the pharmaceutical formulation before the administration of the immunosuppressive agent and wherein the target concentration is maintained by administering doses of the pharmaceutical formulation less frequently because of the following teachings: 1) Ponikau teaches that the effective amount of a formulation can change or remain the same during an effective duration; and the effective frequency of direct mucoadministration can be from about four times a day to about once every other week in some embodiments of the invention, or about twice a day in still other embodiments of the invention; 2) Ponikau also teaches that the effective frequency of direct mucoadministration can be greater than once a day, or greater than once a week; the effective duration can be greater than about 7, 14, 30, 60, 90 days (see column 4, lines 28-38; addresses claims 1-10, 23, 28-31 and 63-65) or can vary from several days to several weeks, months or years (see column 25, lines 43 and 44); and 3) Ponikau further teaches that other treatments can be used in combination with the antifungal agent to help enhance the treatment of non-invasive fungus-induced mucositis conditions, such as a second formulation with immunosuppressants (see column 29, lines 36-51). Thus, one skilled in the art would be motivated to adjust the administration of the antifungal formulation and the

immuosuppressant formulation in order to provide enhanced treatment of non-invasive fungus-induced mucositis conditions.

In regards to claims 100 and 101, the teaching of Ponikau in view of Straub et al. render these claims obvious because Ponikau teaches the applicant's administration method and Straub et al. teaches that applicant's claimed drug (amphotericin B) can be delivered in a porous aerodynamic powder via inhalation to the lungs. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case or either anticipation or obviousness has been established. Thus, the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). Therefore administering the same drug in the same manner will give the same properties.

(2) Claims 77 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ponikau (US 6,207,703 B1) in view of Straub et al. (US 6,395,300 B1) as applied to claims 1-15, 18-20, 23-25, 28-31, 38-40, 63-76 and 98-101 above in further view of Gomez et al. (US 5,854,280).

The teachings of Ponikau and Straub et al. are as applied to claims 1-15, 18-20, 23-25, 28-31, 38-40, 63-76 and 98-101 above.

Ponikau and Straub et al. do not specifically teach that the formulation comprises a propellant, wherein the administration comprises aerosolizing the antifungal gent by opening a valve to release the formulation (claim 77), or wherein the administration comprises a liquid formulation using a compressed gas (claim 78).

Gomez et al. teaches that the antifungal can be administered by inhalation conveniently delivered in the form of an aerosol spray presentation from pressurized packs with the use of a suitable propellant, e.g. dichlorodifluoromethane, trichlorofluoromethane, dichlorotetrafluoroethane, carbon dioxide or other suitable gas, or from a nebuliser. In the case of a pressurized aerosol the dosage unit may be determined by providing a valve to deliver a metered amount (see column 8, lines 47-55).

To one of ordinary skill in the art at the time of the invention would have found it obvious and motivated to combine the method of Ponikau and Straub et al. and a propellant with an opening value or using comprising a compressed gas because of the following teachings: 1) Ponikau teaches a pharmaceutical composition for treating an immune response to fungus in a mammal or a fungal related condition in the pulmonary anatomy comprising an effective dose of an anti-fungal agent (see column 10, lines 42,

43, 50-55) such as amphotericin B (see column 4, line 55 and claim 19) in an aerosol form as a powder or solution (see column 3, lines 65, 66 and column 4, lines 1); and 2) Gomez et al. teaches that aerosol antifungal formulations can be administered with a propellant with an opening value or using a compressed gas (see column 8, lines 47-55).

Response to Arguments

Applicant's arguments have been fully considered but are not persuasive.

> The Applicant argues that none of the references teach or suggest delivering powders to the lungs to treat infections, particularly pulmonary fungus. Further Ponikau does not teach or suggest the elements of porous, aerodynamically light powders having the claimed bulk density and mass median characteristics for delivery to the lungs. Further Straub et al. is drawn to a method of improving rate dissolution of orally or parentrally-administered drugs, not aerodynamically-light particles for pulmonary administration directly to the lung.

The Examiner respectfully disagrees, and notes that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Ponikau

teaches a pharmaceutical composition for treating an immune response to fungus in a mammal or a fungal related condition in the pulmonary anatomy comprising an effective dose of an anti-fungal agent (see column 10, lines 42, 43, 50-55) such as amphotericin B (see column 4, line 55 and claim 19) in an aerosol form as a powder or solution (see column 3, lines 65, 66 and column 4, lines 1). Further Ponikau teaches that direct mucoadministration to the lung airways can include inhalations or nasal sprays provided that the administered agent contacts lung airway mucus prior to crossing epithelium (see column 28, lines 9-12). Any device can be used to administer the agent to the lung airway including inhaler, nebulizer, aerosol canister, spray can, and mask (see column 28, lines 17-20). Straub et al. teaches the following: (1) drugs such as the anti-fungal drug amphotericin B in a porous matrix form to provide a faster rate of dissolution following administration to a patient, as compared to non-porous matrix forms of the drug (see abstract, lines 1-2 and 15-18 and column 4, lines 47-48); (2) the density of the dry porous matrix powder is preferably less than 0.8 g/mL to provide sufficient surface area to enhance wetting of the dry porous matrix and enhance drug dissolution (see column 3, lines 65-66 and column 4, lines 2-5); and (3) the matrix further includes a pegylated excipient, such as pegylated phospholipic to shield the drug from macrophage uptake, which prolongs its half-life or enhance bioavailability of the drug (see column 2, lines 63-67). Thus, it would be beneficial for the methods and compositions of Ponikau to be dry, have a specific bulk density, and wherein the pharmaceutical formulation comprises hollow and/or porous particles within a matrix material that comprises one or more phospholipids because of the reasons stated

above. Further the preferred embodiment of Straub et al. is for oral administration using a dry powder inhaler for pulmonary administration (see column 3, lines 1 and 6-8).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

No claims are allowed. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENDRA D. CARTER whose

telephone number is (571)272-9034. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/K. D. C./
Examiner, Art Unit 1617

/SREENI PADMANABHAN/
Supervisory Patent Examiner, Art Unit 1617